

### REMARKS

Applicants request favorable consideration and allowance of the subject application in view of the preceding amendments and the following remarks

Claims 17-20 and 27-32 are presented for consideration. Claims 17, 20, 27 and 30 are independent. Claims 27 and 30 have been amended to clarify features of the subject invention. Support for these changes can be found in the original application, as filed. Therefore, no new matter has been added.

Applicants note with appreciation that claims 17-20 have been indicated as being allowable over the art of record. In addition to these claims being allowable, Applicants submit that claims 27-32 patentably define features of the scanning exposure apparatus, the device manufacturing method and the surface position detecting method of the subject invention. In this regard, Applicants submit that the cited art, namely U.S. Patent No. 6,277,533 to Wakamoto et al., does not teach or suggest the salient features of Applicants' present invention, as recited in independent claims 27 and 30.

In one aspect of the invention, independent claim 27 recites a scanning exposure apparatus which has an as optical system and exposes an object to a pattern from an original through the optical system while scanning the original and the object. The apparatus includes, among other features, a control unit which obtains offset data for offsetting detection results made by a position detecting unit, based on detection results made by the position detecting unit with respect to a plurality of detection points in a region to be exposed, while a first scan of the object is made relative to the position detecting unit by a stage unit, and obtains corrected data by correcting detection results, which are made by the position detecting unit with respect to a

plurality of detection points in a region to be exposed, while a second scan of the object is made relative to the position detecting unit by the stage unit, using the offset data.

In another aspect of the invention, independent claim 30 recites a surface position detecting method applied to a scanning exposure apparatus. The method includes steps of obtaining offset data for offsetting detection results made by a position detecting unit, based on detection results made by the position detecting unit with respect to plurality of detection points in a region to be exposed, while a first scan of an object is made relative to the position detecting unit by a stage unit, and obtaining corrected data by correcting detection results, which are made by the position detecting unit with respect to a plurality of detection points in a region to be exposed, while a second scan of the object is made relative to the position detecting unit by the stage unit, using the offset data.

As recited in each of independent claims 27 and 30, a detection cycle of the position detecting unit is initialized, during both of the first and second scans, based on a same target position in each region of the object to be exposed, being scanned by the stage unit.

Applicants submit that the cited art, including the Wakamoto et al. patent, does not teach or suggest the salient features of Applicants' present invention, as recited in independent claims 27 and 30, in which offset data and corrected data are utilized in the recited manner, and wherein a detection cycle of a position detecting unit is initialized, during both of first and second scans, based on a same target position in each of an object to be exposed, being scanned by a stage unit.

Applicants submit, therefore, that the present invention, as recited in independent claims 27 and 30, also is patentably defined over the cited art.

Dependent claims 28, 29, 31 and 32 also should be deemed allowable, in their own right, for defining other patentable features of the present invention in addition to those recited in their respective independent claims. Further individual consideration of these dependent claims is requested.

Applicants submit that the instant application is in condition for allowance. Favorable reconsideration and an early Notice of Allowance are requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should be directed to our address listed below.

Respectfully submitted,



Attorney for Applicants  
Steven E. Warner  
Registration No. 33,326

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200

DC\_MAIN 173111v1